**SET – I**

**Q. No 1. Discuss the benefits and key challenges of e-commerce**

**Benefits of e-commerce**

**Key challenges of e-commerce**

**Benefits of e-commerce =>**

E-commerce is being extensively adopted by the business community in India because of the cost benefits it provides to business owners, along with the ease of access it offers to consumers. Business owners can reduce costs involved in setting up offices, inventory and distribution channels. The easy access to online portals irrespective of locations and time zones of a customer is another reason for extensive adoption of e-commerce in India.

Apart from this, the mode of payment for carrying out online transactions has become safe and secure with the growing use of credit and debit cards.

**Benefits to Customers ->**

The various benefits of e-commerce to customers and organizations in India are depicted below –

1. Offers wider range of choices
2. Products or services can be purchased from remote areas
3. Allows suppliers to reach global markets Allows customers greater control by providing easy-to-use ordering systems
4. Enables consumers to make price comparison
5. Saves time through automated payment systems
6. Provides convenience of shopping from home

**Benefits to Organisations ->**

1. Reduces costs for inventory management
2. Allows suppliers to reach global markets
3. Helps in monitoring customers’ buying habits and interests
4. Reduces costs to establish stores
5. Reduces labour costs
6. Reduces advertising costs

**Key challenges of e-commerce =>**

The major problem that e-commerce faces in India are due to barriers in infrastructure.

* **Inadequate logistics**

Organizations using e-commerce need to ensure safe and timely delivery of products to their customers. This requires ensuring that their delivery system and logistics are under control and in line with their ordering systems.

* **Customer acquisition in a dominant off-line shopping culture**

Indians are yet to adopt new methods of transactions. The idea of making a purchase or sale virtually, using a computer and the Internet, creates doubts in the minds of customers about the authenticity of the organization, the product or service and the modes of payment.

* **Customer service**

One significant way by which organizations can out-perform their competitors in the field of e-commerce is the quality of customer service they provide.

* **Achieving profitability**

Increasing price competition in Indian e-commerce leads organizations to outbid each other, each attempting to offer a lower price for the same products. This can lead to organizations offering prices lower than their cost to overcome competition, ultimately resulting in losses. Organizations’ profitability is reduced in developing a favourable e-commerce ecosystem.

* **Lack of privacy**

Personal and business data is transmitted over the Internet during an e-commerce transaction. Therefore, privacy is not ensured and can lead to misuse of data.

**Q. No 2. Recognize various electronic markets and online portals**

**Electronic markets**

**Online portals**

An electronic market is a virtual marketplace created by an organization to offer products and services to other organizations or individuals by using the Internet. This is done by creating online portals that work as the point of access to these markets.

**Electronic markets =>**

Electronic markets run parallel to the brick and mortar retail shops, malls and stores. They are virtual markets where transactions take place through a computer connected to the Internet. Just like the physical shopping areas, electronic markets use websites to display a range of products and services over the Internet. Some websites have online catalogues to display the same. Electronic markets are based on either of the below three following models

* **Broker model:**

This the most basic model of an e-market. Customers select the supplier’s webpage, request for goods and make a payment. The supplier, in turn, solicits the details of the order, validates the

payment, checks for availability, confirms the order and delivers the goods to the customer. Examples of this model are:

* <http://www.myntra.com>
* <http://www.jabong.com>
* <http://www.flipkart.com>
* **Customization model**

This model is different from the broker model in the way a customer places the order. Customers select the supplier’s webpage, enquire about a product and specify their preferences. The supplier then presents various options to the customer. If the requirements are met, the customer places the order and makes the payment. The supplier, in turn, solicits the details of the order, validates the payment, checks for availability and confirms the order by delivering the goods to the customer. Examples of this model are:

* <http://www.makemytrip.com>
* <http://www.yatra.com>
* **Contact model:**

This model is based on the auction or bid markets. Customers visit the supplier’s webpage and submit their bid for the product. Similarly, many customers submit their bid for the product. The supplier here acts as a channel between buyers and sellers for a commission. The supplier collects all the bids, selects the winning bids, matches the buyers and sellers of the product and mediates the trades. Examples of this model are:

* <http://www.olx.in>
* <http://www.ebay.com>

**Online portals =>**

An online portal is a simple website serving as a point of access to the Internet and usually includes a search engine or a collection of links to other websites having relevant information or applications.

* **Different types of online portals with examples depicted below:**

|  |  |  |
| --- | --- | --- |
| **Type** | **Specification** | **Examples** |
| Public portals | Used universally by the Internet users | Yahoo and Google |
| e-business portals   1. B2C portals 2. C2B portals 3. B2B portals | Used to support business  transactions | http://www.amazon.com  http://www.ebay.com  http://www.monsterindia.com  http://www.naukri.com  http://www.flipkart.com |
| Intranets | Used to connect employees within an organization | Employee portals and  University portals |

* **Features of a portal:**

A good website should have the following features in order to retain customers:

1. Should provide high-quality content
2. Should be user-friendly
3. Should use compressed applications to support a quick download
4. Should be regularly updated

* **Benefits of a portal:**

A portal can be beneficial in the following ways -

1. Helps in the globalization of an enterprise
2. Improves productivity
3. Reduces administration costs
4. Improves customer service
5. Increases revenue
6. Helps in advertising and promotion

**Q. No 3. Explain the concept of email-marketing, social media marketing, Search Engine Optimization and Search Engine Management.**

**Email-marketing**

**Social Media Marketing**

**Search Engine Optimization**

**Search Engine Management**

**Email-marketing =>**

One of the most widely used medium of online advertising is electronic mails or e-mails. It is a cost-effective channel for Web-marketing that allows quicker responses than other advertising channels. It involves direct mailing of a commercial message to a group of people using e-mail services. The message could be to send advertisements or request sales or donations and is meant to build loyalty, trust and brand awareness.

**Purposes of Email-marketing:**

* To enhance the relationship of an organization with its existing customers, to encourage customer loyalty and retention.
* To acquire new customers or convince existing customers to purchase the products or services.
* Adding advertisements to e-mail messages sent by other organizations to their customers.

**Social Media Marketing =>**

Social media marketing usually focusses on creating content that draws the attention of social media users and encourages them to share it within their networks.

A convenient way to communicate and interact with potential online customers is through the use of social media marketing. Organizations are increasingly using social networking websites, such as Facebook, Twitter and LinkedIn to turn the attention of the individuals using these sites towards products and services offered by these organizations. Facebook allows advertisers to reach people belonging to specific groups with specifically created and well-targeted content. These advertisements can be shared with others in the network.

The Internet has made social networking easily accessible. Hence, it is a good platform to foster brand awareness and market products and services by organizations.

**Search Engine Optimization =>**

SEO is the process of enhancing the visibility of a website in a search engine's search results.

The process of designing, writing and coding a website to maximize the chance that its pages will appear at the top of search engine results for selected keywords and phrases is known as Search Engine Optimisation. SEO improves the volume and quality of traffic to a website. It may target different types of search, including image search, local search and industry-specific search. This increases the Web presence of a website. As an Internet marketing strategy, search engine optimizers consider how search engines work and what people search for. Optimizing a website primarily involves editing its content and coding to increase its relevance to specific keywords and to remove barriers on search engines.

**Search Engine Management =>**

This can be achieved through a combination of paid advertising, search-engine-optimized website design and uninterrupted marketing. SEM is a form of Internet marketing involving the promotion of websites by enhancing their visibility in search engine results. SEM refers to the act related to researching, submitting and positioning a website within search engines to attain maximum traffic to the website.

When a person enters relevant words into an engine, the search engine displays a list of pages with sites ranked according to relevance.

**SET - II**

**Q. No 1. Discuss the back-end support required for online banking**

**Back-end support required for online banking**

**Back-end support required for online banking =>**

E-banking operations involve three key functions namely -

* Front-end support
* Middle-end support
* back-end support

These benefits can be discussed as follows:

* **Front-end support**

This includes the sales and marketing functions, and compliance and technological support for banking operations.

* **Middle-end support**

This function aims to co-ordinate front-end operations with back-end operations. For example, client services are a part of middle-end support.

* **Back-end support**

This involves handling all banking transactions and operations performed by using the Internet.

E-banking has automated most of the transactional activities that take place in banks. However, the use of technology- and IT-related systems and software requires back-end support for proper functioning. Back-end operations in online banking integrate the bank’s transaction processing systems and databases with its Internet banking applications. IT has automated most of these back-end support operations. Back-end operations save banks from meeting unnecessary expenses and reduce errors that often result from manual interventions. Automating back-end support for online banking improves performance in several ways –

**Benefits of back-end support in online banking -**

These benefits can be discussed as follows:

* **Faster online transactions**

Core banking functions such as withdrawals and deposits offered through the Internet have improved with automation. Software applications to support these functions help in maintaining frequently-accessed data such as customer information, product information, and new offers and schemes. Faster online transaction processing facilitates banks to offer more personalized services, which result in attracting and retaining more customers.

* **Faster analytics**

Automated back-end support systems in banks help in evolving from a periodic batch reporting environment to a real-time reporting environment. These back-end systems can store large datasets in memory including current and historical transaction data. The stored data helps in reducing the time it takes to generate reports, resulting in faster action in the case of faulty or fraudulent transactions.

* **Faster back-end processing**

Individual functions in online banking systems such as funds transfers or payment of bills can be improved with the automation of back-end support. The software stores key data such as credit information, customer transaction history and associated rules to accelerate transactions.

Such developments in back-end support in online banking will help banks to deliver business and operational benefits rapidly and successfully. However, automation of back-end processes is not a simple task for banks. The IT architecture needs to support the automation procedure of banking processes.

**Q. No 2. Explain various approaches of Online Publishing.**

**Online Archive**

**New Medium**

**Publication Intermediation**

**Dynamic and Justin-Time**

Online publishing is being practiced by individuals from various fields with different objectives. Thus, there are different procedures and approaches to online publishing as below –

1. The Online Archive Approach
2. The New Medium Approach
3. The Publication Intermediation Approach
4. The Dynamic and Just-in-Time Approach

**Online Archive =>**

This approach is used by corporate and commercial publishers, such as academic and journal publishers. A digital archive is presented through the Internet as well as through print media, Compact Disks (CDs) or other media. Paper publications are converted into digital formats through this approach. For example, online library catalogues and bibliographic databases.

**New Medium =>**

This approach is used to create new material for the Internet. New material and content are added to paper publications. This approach is mainly used by commercial print publishers such as magazines, which consider the Internet as an alternative for publishing and not as a replacement for print publishing. Real-time new delivery, edutainment (education + entertainment) and personalized news delivery websites are some examples of publishers using the new medium approach.

**Publication Intermediation =>**

This approach is used to create new service opportunities for intermediaries. There is a high demand for educational books and study materials. Organizations that offer material owned by more than one publisher have to perform the intimidating task of seeking permissions each time. Organizations that operate to manage copyright clearances are emerging as new intermediaries to overcome such problems. The publication intermediation approach is used to create online directories that help people locate goods and services. Intermediaries in publishing provide ease of operation, speed and detailed information.

**Dynamic and Justin-Time =>**

Online content is dynamic and can be created based on real-time and transmitted in the way best suited to the users’ tastes, location and preferences. Search engines recognize repeat visitors to a website and display items or hyperlinks as per the user’s preferences. Publishers no longer need to maintain lengthy catalogues and update each Web page. Instead, the content, style and format of Web pages are stored separately and used to create customized Web pages later.

Just-in-time publishing refers to publishing where content flows into the computer just as users need it. Online retailers use this technique by displaying items or content related to an individual’s requirement.

**Q. No 3. Describe open and closed loop payment systems**

**Open-loop payment systems**

**Closed loop payment systems**

Online payment systems were initiated in 1960s and are primarily used by financial and banking institutions. Online payment systems allow individuals to participate in money exchanges through computer networks such as the Internet. Electronic payment refers to the exchange of funds using electronic devices connected to the Internet. There are many formats of e-payment such as payment cards, Internet-banking or mobile payments. Of these, credit card payment systems are the most common and are extensively used for making e-payments. It extends the use of credit cards for the use of online shopping.

The main advantage of electronic payment system is the convenience and ease of use it provides to the users. However, there are certain legal and security issues related to e-payments owing to the fact that it requires the transaction of sensitive information over the Internet. There are also certain essential acts and standards specified for electronic payment mechanisms in order to increase the customers’ confidence and enhance their use for e-commerce.

General purpose and limited-purpose payment systems primarily operate under two different models:

1. Open-loop payment systems
2. Closed loop payment systems

**Open-loop payment systems =>**

Payment cards such as Visa and MasterCard operate through a system that connects the bank or

financial institute that issues the card to the customer (the issuer) with the one that provides banking facilities to the retailer (the acquirer). This system controls the flow of information and funds between them.

Open-loop network operators (such as Visa) do not issue payment cards or determine interest rates that are charged from the customer for using their cards. This is taken care of by the issuer banks. The network operators do not determine the fees that merchants are charged for accepting payments through cards or the merchant discount rate. This is the responsibility of acquirer banks.

**Closed loop payment systems =>**

A closed-loop system does not require the involvement of a third party financial institution or bank. Unlike the open-loop payment system, in a closed-loop payment network, the payment services are delivered directly to merchants and cardholders by the owner of the network. No third party is involved in the process. There can be closed-loop networks such as American Express that issues payment cards directly to customers for use at different merchant stores while also enabling the merchants to accept payments using these cards. The other form of closed-loop network is limited-purpose payment cards issued to customers by individual merchants.

**For example**:

Compare Master and Visa cards, which use an open-loop payment system, with American Express, which uses a closed-loop payment system.